Preference-Aligned Fertility Management: Assessing the Feasibility of a New Measure of Contraceptive Autonomy

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Universal access to sexual and reproductive health care – including family planning (FP) – is a global priority, yet there is no standard approach to measuring rights-based FP program outcomes. Current outcome measures focused on contraceptive uptake/use may incentivize coercion.

METHODS

Aims: To assess Preference-Aligned Fertility Management (PFM), a newly proposed measure[1] defined as concordance between self-reported demand and use of contraception

Study population: Married adolescent girls aged 15-19 initiating modern contraception within 15 public FP clinics in Kaduna and Nasarawa States of Northern Nigeria. Study facilities were supported by Adolescents 360 (A360), a program led by Population Services International which aims to expand contraceptive access through adolescent-responsive programming

Design: Prospective cohort study with facility-based recruitment; surveys conducted at baseline and at 4 waves of follow-up at 17-week intervals

Variable Ascertainment: Two PFM variables (Steps 1 and 2) were captured:

STEP 1 assesses concordance between desire and actual use of (any) contraception

	Wants to use (any) contraception	Does not want to use (any) contraception	Unsure whether wants to use
Current use of (any) contraception	PFM	No PFM	PFM
Current non-use	No PFM	PFM	PFM
Current sometimes use	PFM[a]	No PFM	PFM[a]

STEP 2 incorporates method-specific preferences

		Wants to use (any) contraception	Does not want to use (any) contraception	Unsure whether wants to use
Current use of (any) contraception	Satisfied with method	PFM	No PFM	PFM
	Unsatisfied with method	No PFM		No PFM
Current non-use	--	No PFM	PFM	PFM
Current sometimes use	Satisfied with method	PFM[a]	No PFM	PFM[a]
	Unsatisfied with method	No PFM		No PFM

PFM classification

[a]Respondent reported that there are no times that they want to, but cannot, use contraception (without reference to a specific method). Tables adapted from Holt et al. (2023)[1]

Statistical Analysis: We described point prevalences of PFM (Steps 1 and 2) at waves 1-4. We used χ^2 and Wilcoxon-ranked sum tests to identify characteristics correlated with 3.5-month PFM. All analyses are complete case.

RESULTS: 96% (n=1,056/1,101) of participants completed the 3.5 follow-up; 90% (n=993) completed all 4 waves of follow-up. Study participants were primarily 18 (n=396, 38%) or 19 (n=515, 49%) years old and Muslim (85%). One-fifth (n=208) had previously used contraception. At enrollment, 59% were using injectables and 20% implants.

1 Prevalence of PFM at 3.5 months was 97%. 99% of girls who wanted to were currently using contraception. Most discordance between desired and actual contraceptive use was observed among girls who were using contraception but did **not** want to be.

	Wants to use (any) contraception N (%)	Does not want to use (any) contraception N (%)	Unsure whether wants to use N (%)	TOTAL
Current use of (any) contraception	988 (99%)	30 (57%)	1 (33%)	1,019 (97%)
Current non-use	6 (0.6%)	23 (43%)	1 (33%)	30 (3%)
Current sometimes use	6 (0.6%)	0 (0%)	1 (33%)	7 (0.7%)
TOTAL*	1,000 (95%)	53 (5%)	3 (0.3%)	1,056 (100%)

Notes: Teal cells represent practicing PFM; pink represent not practicing PFM
* Row percentages; all other percentages are column percentages

2 Among participants using contraception at 3.5 months, we observe significant differences in method type by PFM

Girls without PFM reported lower method satisfaction, although this difference was not statistically significant.
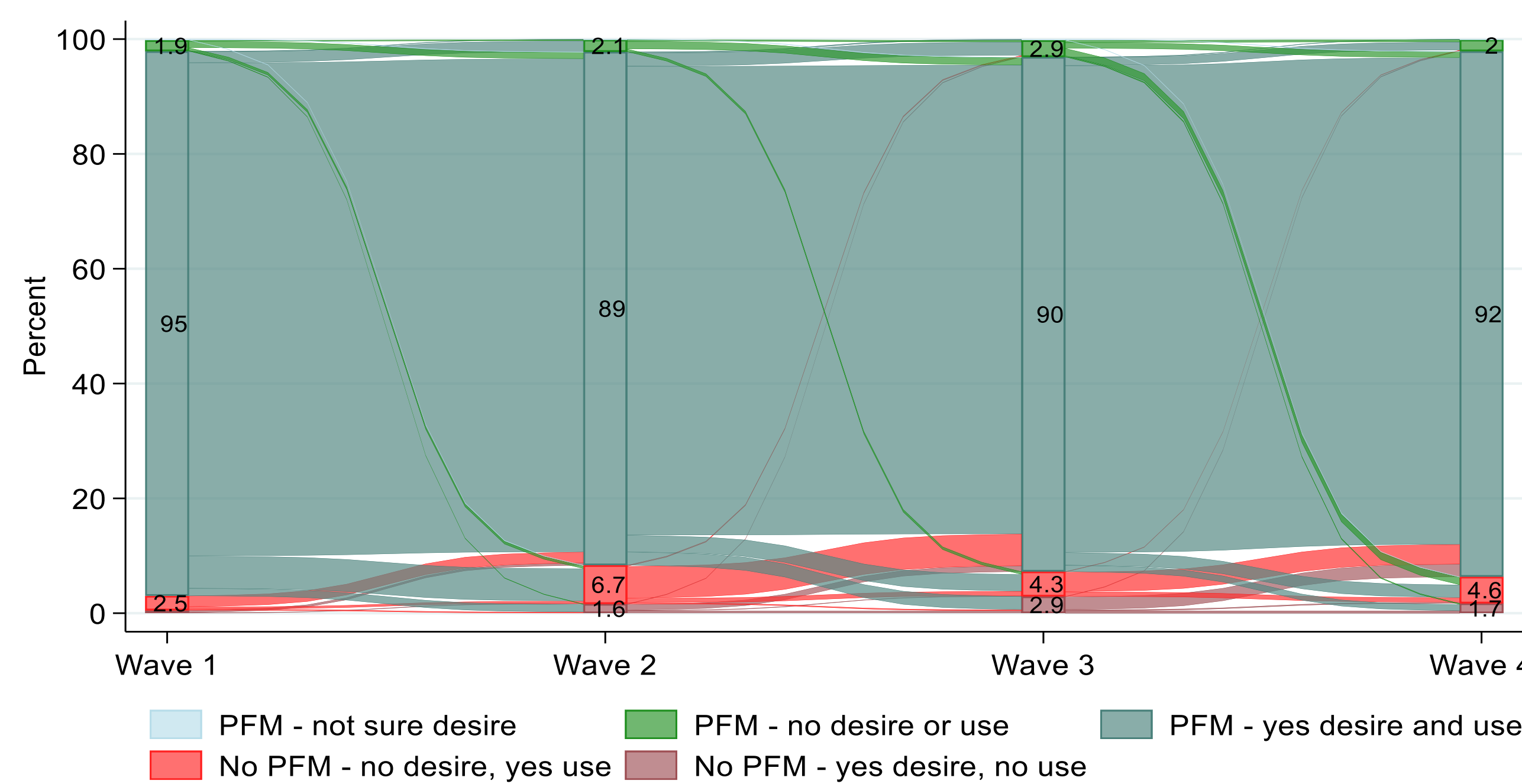
Contraceptive Characteristics of Participants Using Contraception at 3.5 Months

	PFM (Step 1)		
	No (N=30) n (%)	Yes (N=996) n (%)	p-value
Method type			
IUD	0 (0)	9 (0.9)	
Implant	10 (33)	200 (20)	
Injectable	16 (53)	620 (62)	
OCPs	1 (3)	152 (15)	<0.001[a]
ECP	1 (3)	0 (0)	
Male condom	1 (3)	11 (1)	
Female condom	0 (0)	3 (0.3)	
Withdrawal	1 (3)	1 (0.1)	
Use of LARC method	10 (33)	209 (21)	0.104[a]
Method satisfaction (median, IQR)	8 (8, 10)	10 (8, 10)	0.052[b]

LARC = long-acting reversible contraceptive (implants and IUD);
[a]X² test; [b] Wilcoxon rank-sum test

3 Incorporating method satisfaction reduced the prevalence of PFM at 3.5 months by 4% points – from 97% (Step 1) to 93% (Step 2).

One-third of girls could be considered unsatisfied or passive users of their current method.

Using scoring guidance adapted from the Net Promoter Score, 65% of users are considered "promoters" (score of 9 or 10), 31% "passives" (7 or 8), and 3% "detractors" (<7)

		Wants to use (any) contraception	Does not want to use (any) contraception	Unsure whether wants to use
Current use of (any) contraception	Satisfied with method	954 (95%)	30 (57%)	1 (33%)
	Unsatisfied with method	34 (3%)	0 (0%)	0 (33%)
Current non-use	--	6 (0.6%)	23 (43%)	1 (33%)
Current sometimes use	Satisfied with method	6 (0.6%)	0 (0%)	1 (33%)
	Unsatisfied with method	0 (0%)		

Notes: No respondents reporting sometimes use of contraception reported that there were times that they wanted to, but could not, use contraception (without reference to a specific method). Tables adapted from Holt et al. (2023)[1]

4 PFM (Step 1) ranged from 92-97% across waves, with 20% of respondents (n=203/993) not practicing PFM at 1 or more wave

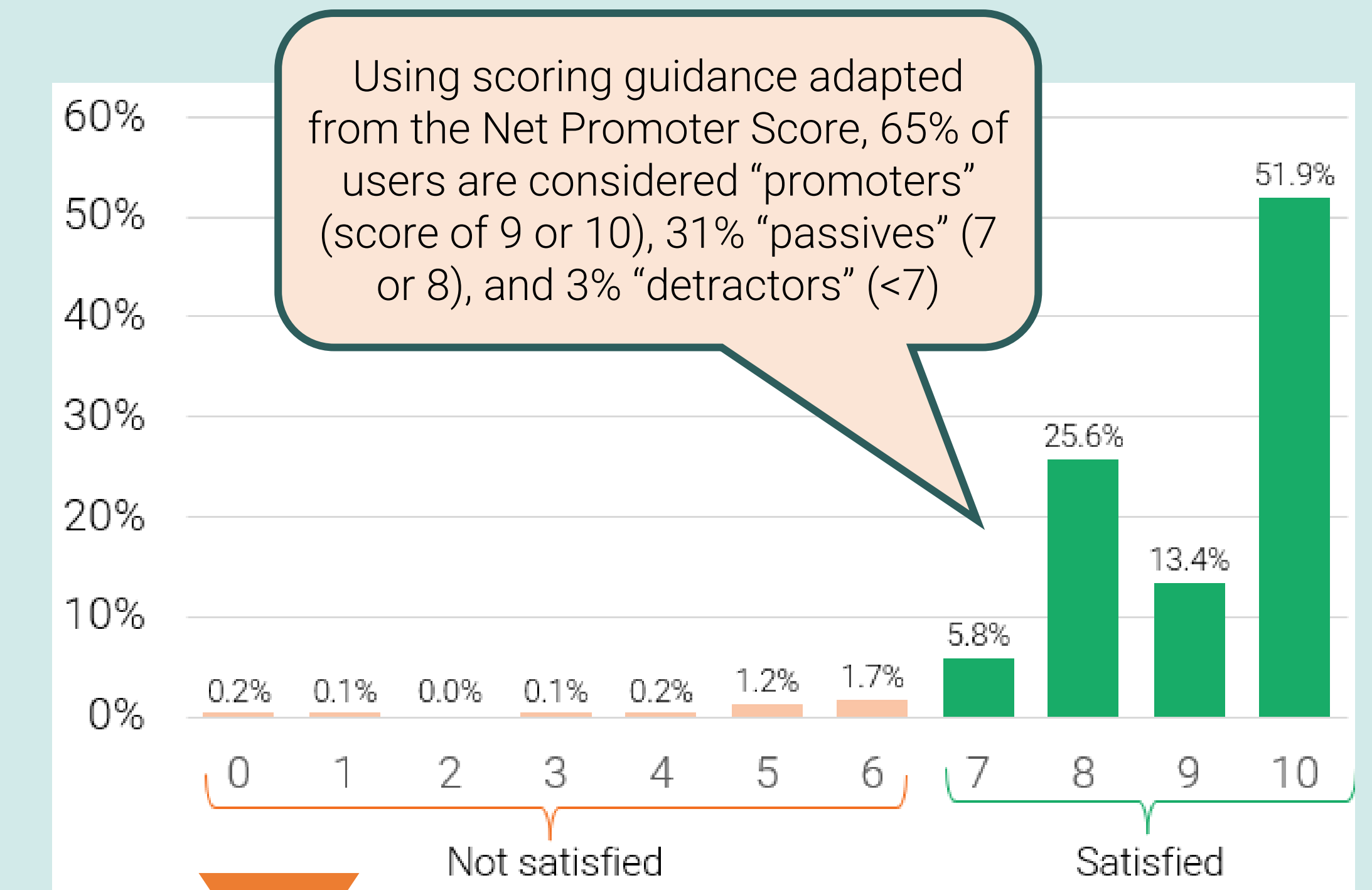Across all waves, most discordance was due to undesired contraceptive use.

Patterns of PFM among respondents not practicing PFM at 1 or more wave (n=203)

Notes: Patterns of PFM among all 993 respondents with complete data (LEFT) and among 203 respondents not practicing PFM at 1 or more waves (RIGHT)

Preference-aligned fertility management is a new, straightforward FP outcome measure that can provide actionable data to advance rights-based FP programs and policies.

CONCLUSIONS:

Within the context of an adolescent SRHR program in Northern Nigeria, discordance between self-identified demand for and use of contraception was prevalent, with most discordance due to unwanted contraceptive use. Such information may be useful for program implementers and policymakers to direct targeted support for contraceptive autonomy – whether to expand access to those who wish to initiate or continue contraceptive use, or to remove barriers to method switching and discontinuation for those who do not.

[1] Holt K, Galavotti C, Omoluabi E, Challa S, Waiswa P, Liu J. Preference-Aligned Fertility Management as a Person-Centered Alternative to Contraceptive Use-Focused Measures. Studies in Family Planning. 2023;54(1):301-8.